

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/006062

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02P3/22 H02P6/22 H02P6/24 H02P6/10 H02P6/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04, 2 April 2003 (2003-04-02) -& JP 2002 369576 A (NIPPON DENSAN CORP), 20 December 2002 (2002-12-20) cited in the application the whole document	1-8
Y	WO 97/05691 A (FANUC LTD ; INABA KIICHI (JP); YAMADA YUICHI (JP)) 13 February 1997 (1997-02-13) the whole document	1-8
A	US 4 376 261 A (VON DER HEIDE JOHANN ET AL) 8 March 1983 (1983-03-08)	
A	EP 1 162 726 A (YASKAWA DENKI SEISAKUSHO KK) 12 December 2001 (2001-12-12)	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

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- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

20 September 2004

Date of mailing of the international search report

28/09/2004

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2002369576 A	20-12-2002	NONE	
WO 9705691 A	13-02-1997	JP 9047054 A WO 9705691 A1	14-02-1997 13-02-1997
US 4376261 A	08-03-1983	CH 658348 A5 DE 3044056 A1	31-10-1986 19-06-1981
EP 1162726 A	12-12-2001	JP 3489022 B2 JP 2000270577 A EP 1162726 A1 US 6653806 B1 CN 1347586 T WO 0055963 A1	19-01-2004 29-09-2000 12-12-2001 25-11-2003 01-05-2002 21-09-2000